FIG.1

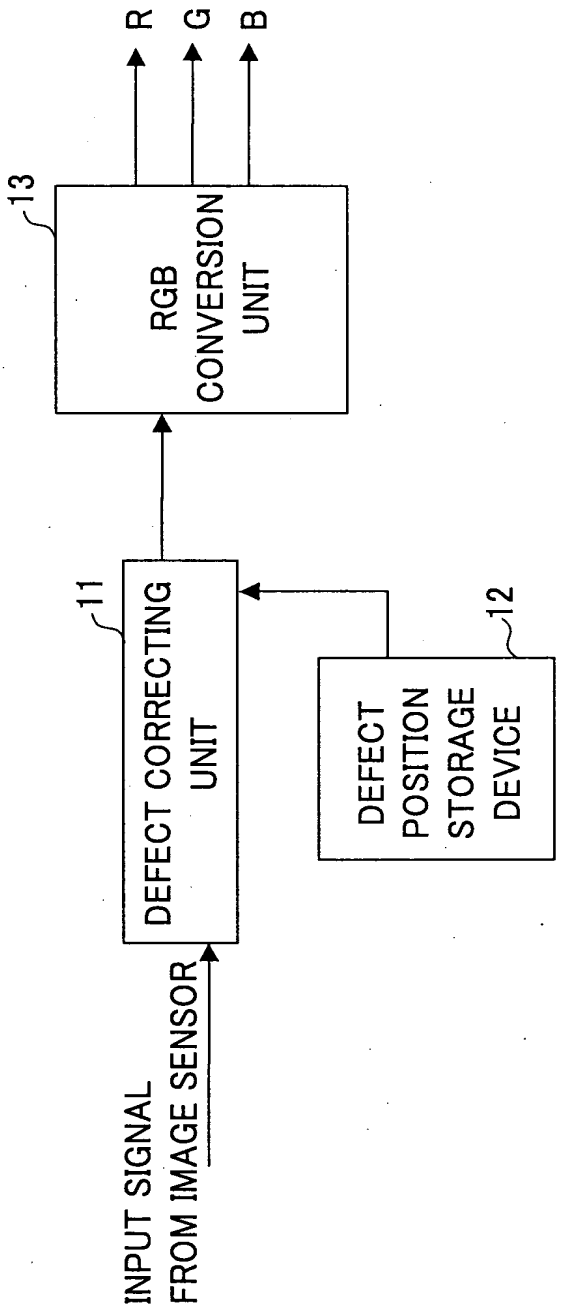
R
G
B
13
RGB CONVERSION UNIT
11
DEFECT CORRECTING UNIT
12
DEFECT POSITION STORAGE DEVICE
INPUT SIGNAL FROM IMAGE SENSOR

FIG.2

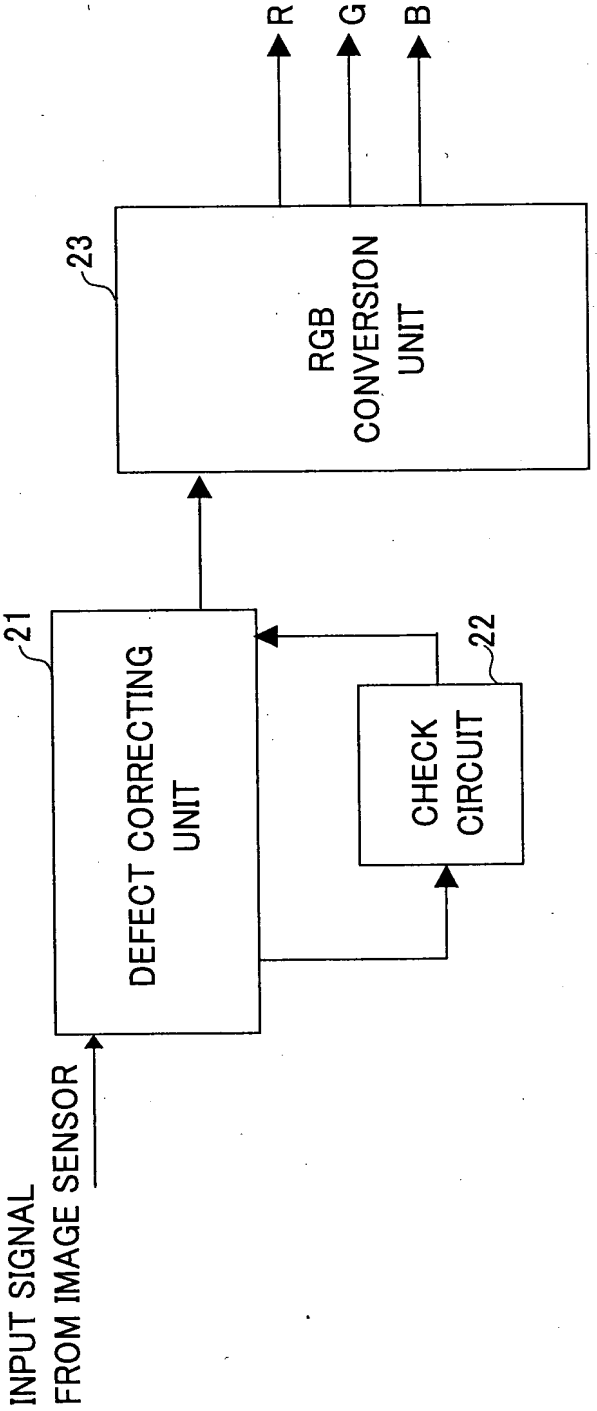
R
G
B
23
RGB CONVERSION UNIT
21
DEFECT CORRECTING UNIT
22
CHECK CIRCUIT
INPUT SIGNAL FROM IMAGE SENSOR

FIG.3

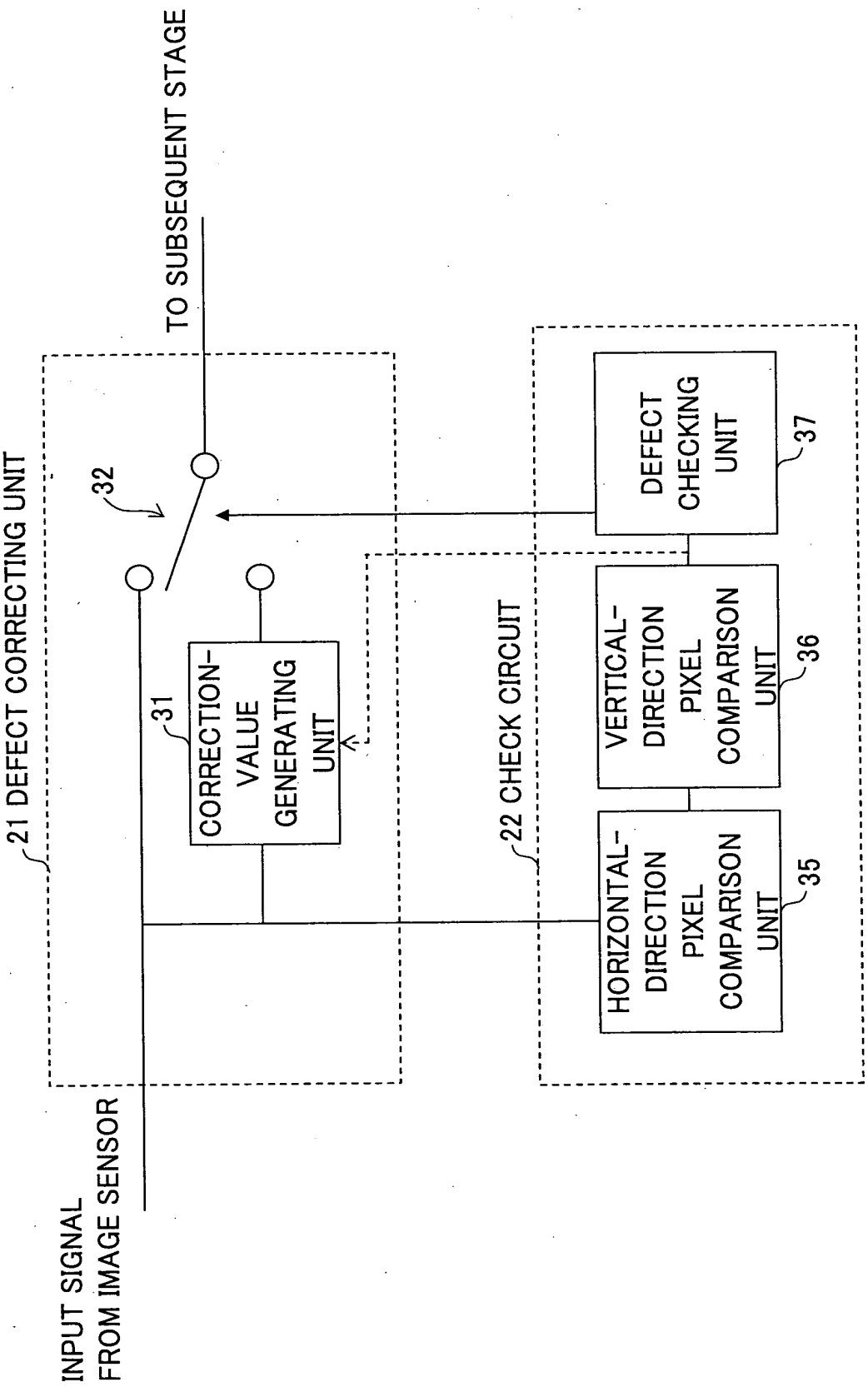
TO SUBSEQUENT STAGE
21 DEFECT CORRECTING UNIT
32
31
CORRECTION-VALUE GENERATING UNIT
22 CHECK CIRCUIT
DEFECT CHECKING UNIT
37
VERTICAL-DIRECTION PIXEL COMPARISON UNIT
36
HORIZONTAL-DIRECTION PIXEL COMPARISON UNIT
35
INPUT SIGNAL FROM IMAGE SENSOR

FIG.4

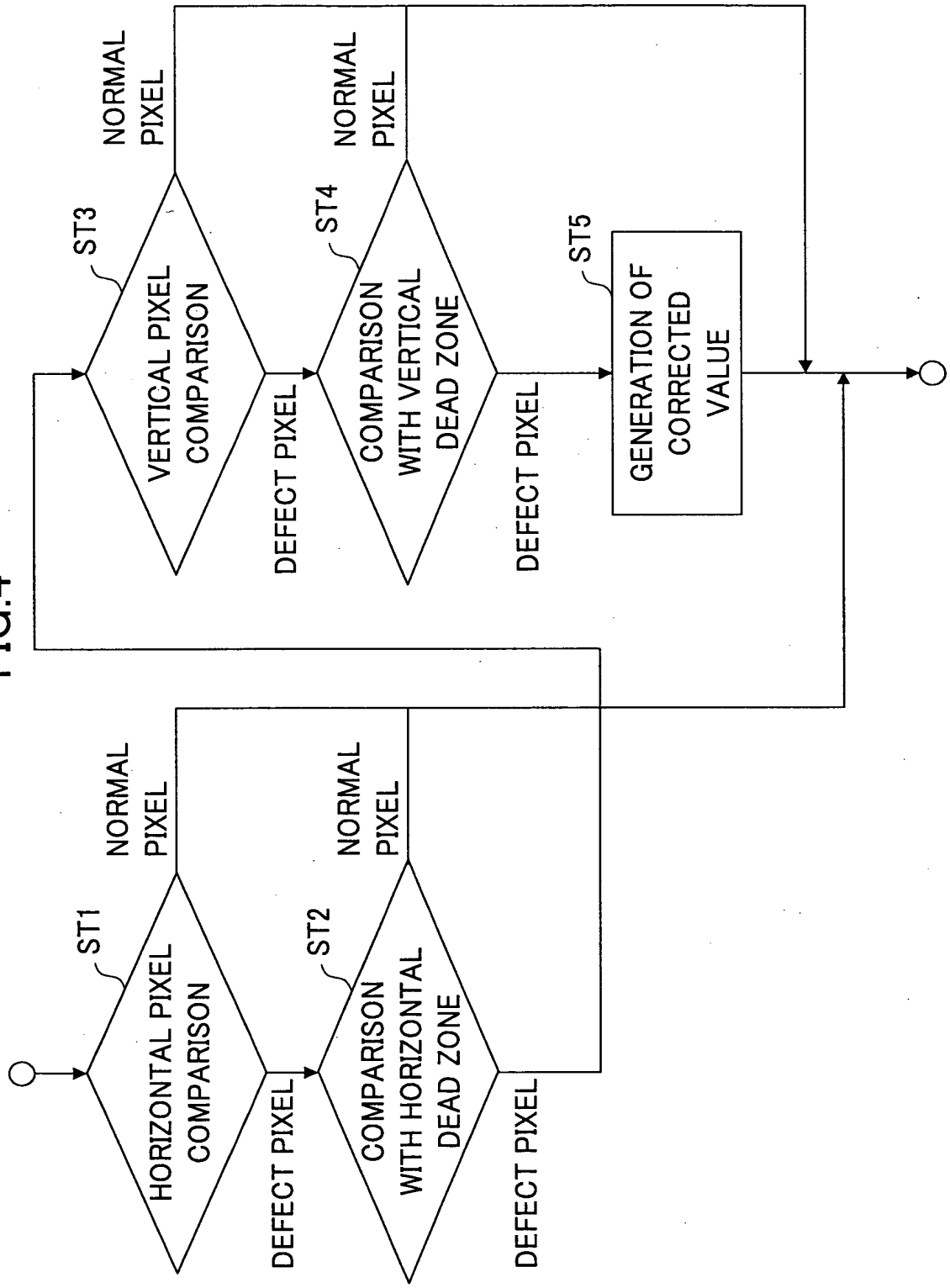
ST1
HORIZONTAL PIXEL COMPARISON
NORMAL PIXEL
DEFECT PIXEL
ST2
COMPARISON WITH HORIZONTAL DEAD ZONE
NORMAL PIXEL
DEFECT PIXEL
ST3
VERTICAL PIXEL COMPARISON
NORMAL PIXEL
DEFECT PIXEL
ST4
COMPARISON WITH VERTICAL DEAD ZONE
NORMAL PIXEL
DEFECT PIXEL
ST5
GENERATION OF CORRECTED VALUE

FIG.5A

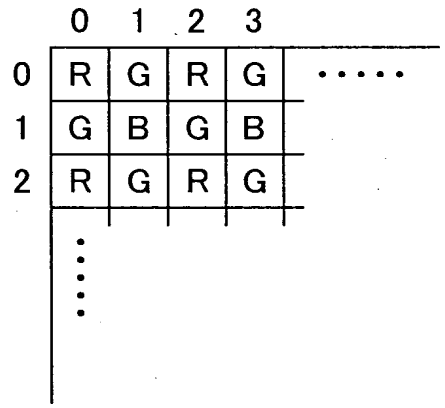

FIG.5B

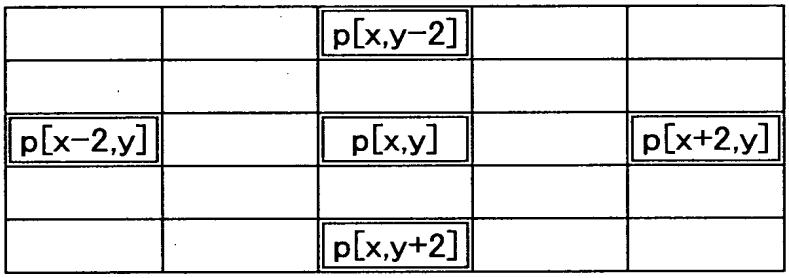

FIG.6

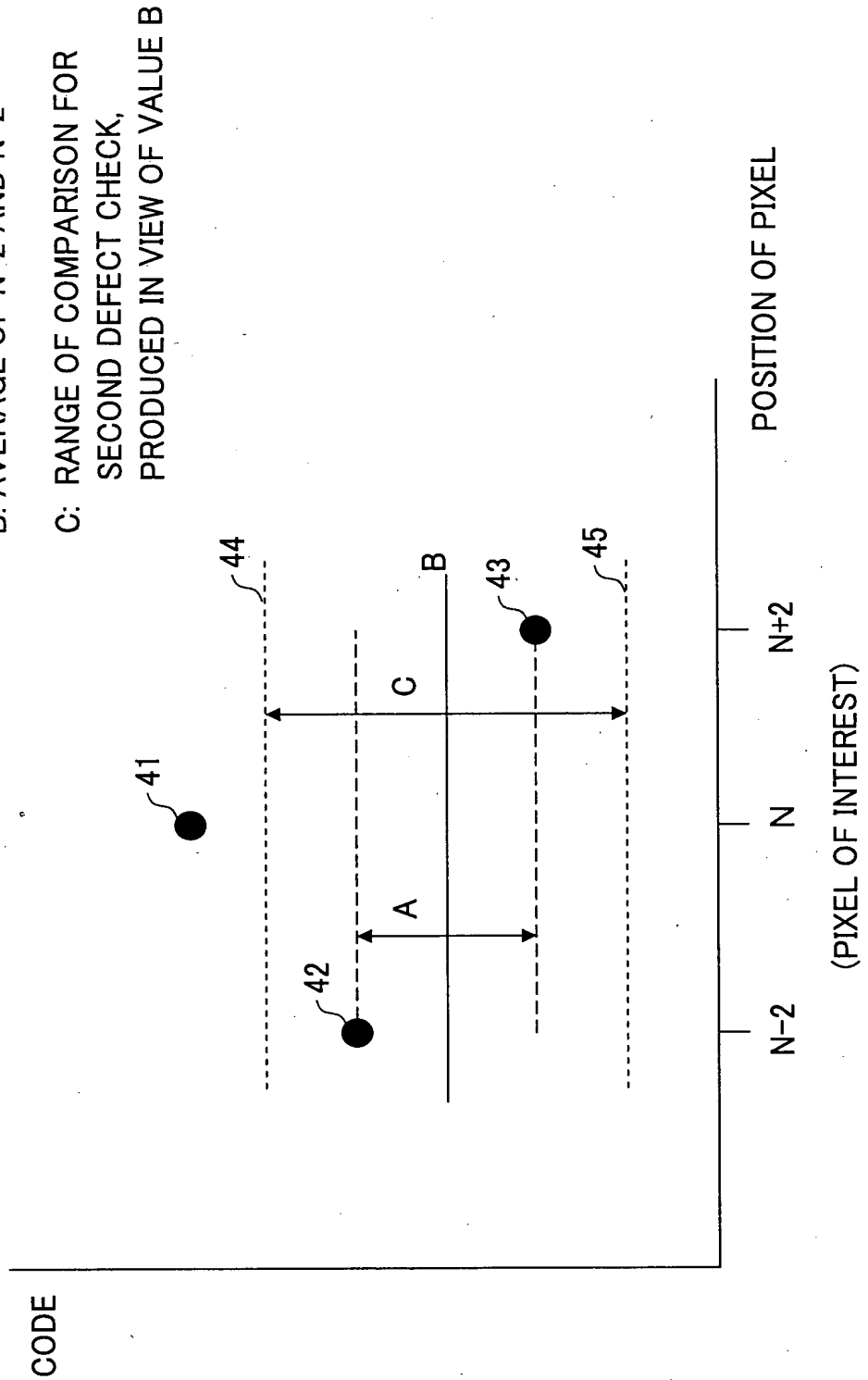
A: RANGE OF COMPARISON FOR FIRST DEFECT CHECK
B: AVERAGE OF N-2 AND N+2
C: RANGE OF COMPARISON FOR SECOND DEFECT CHECK, PRODUCED IN VIEW OF VALUE B
CODE
POSITION OF PIXEL
(PIXEL OF INTEREST)
N-2
N
N+2
41
42
43
44
45
A
B
C

FIG.7

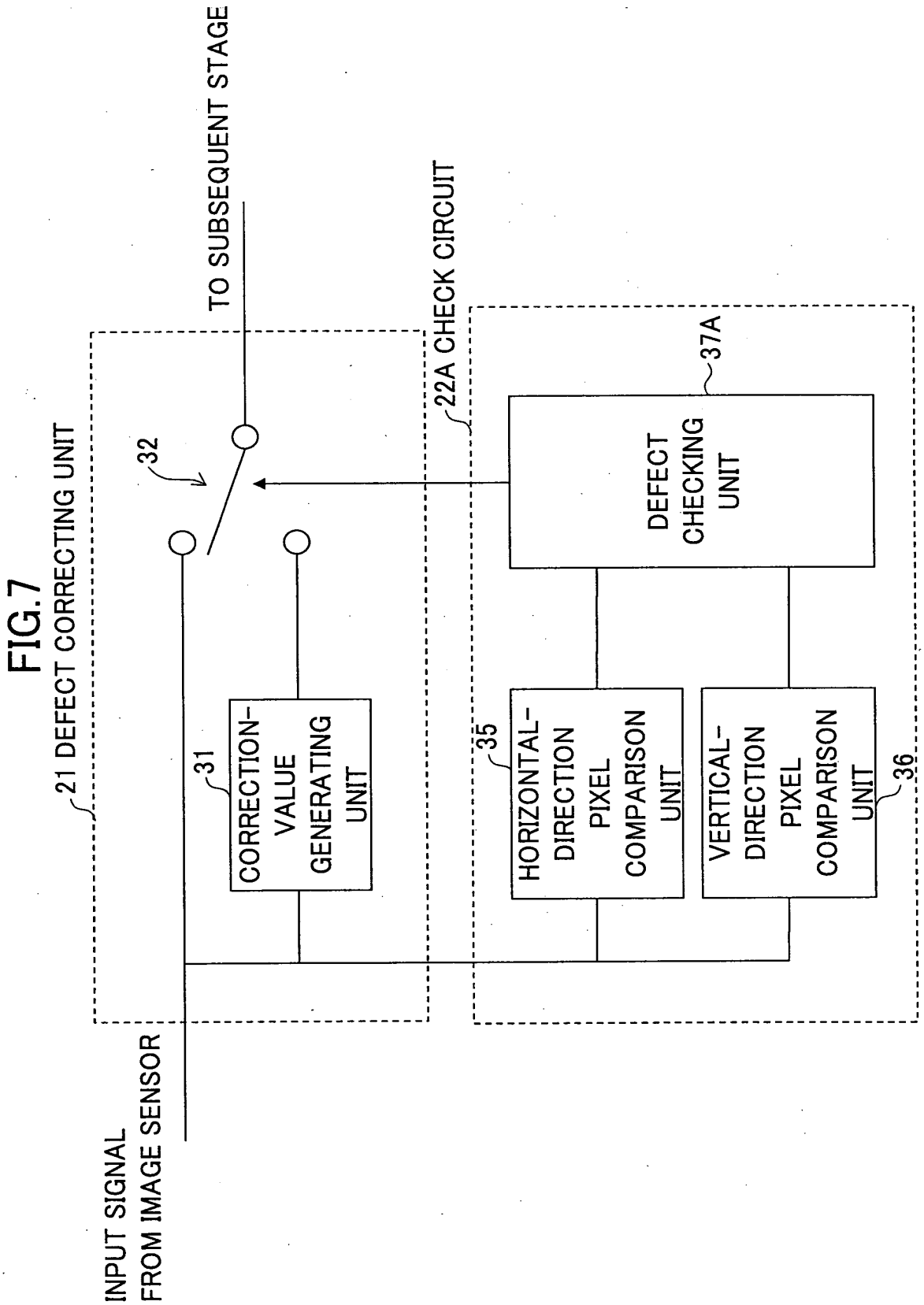
INPUT SIGNAL FROM IMAGE SENSOR
21 DEFECT CORRECTING UNIT
31
CORRECTION-VALUE GENERATING UNIT
32
TO SUBSEQUENT STAGE
22A CHECK CIRCUIT
35
HORIZONTAL-DIRECTION PIXEL COMPARISON UNIT
36
VERTICAL-DIRECTION PIXEL COMPARISON UNIT
37A
DEFECT CHECKING UNIT

FIG.8

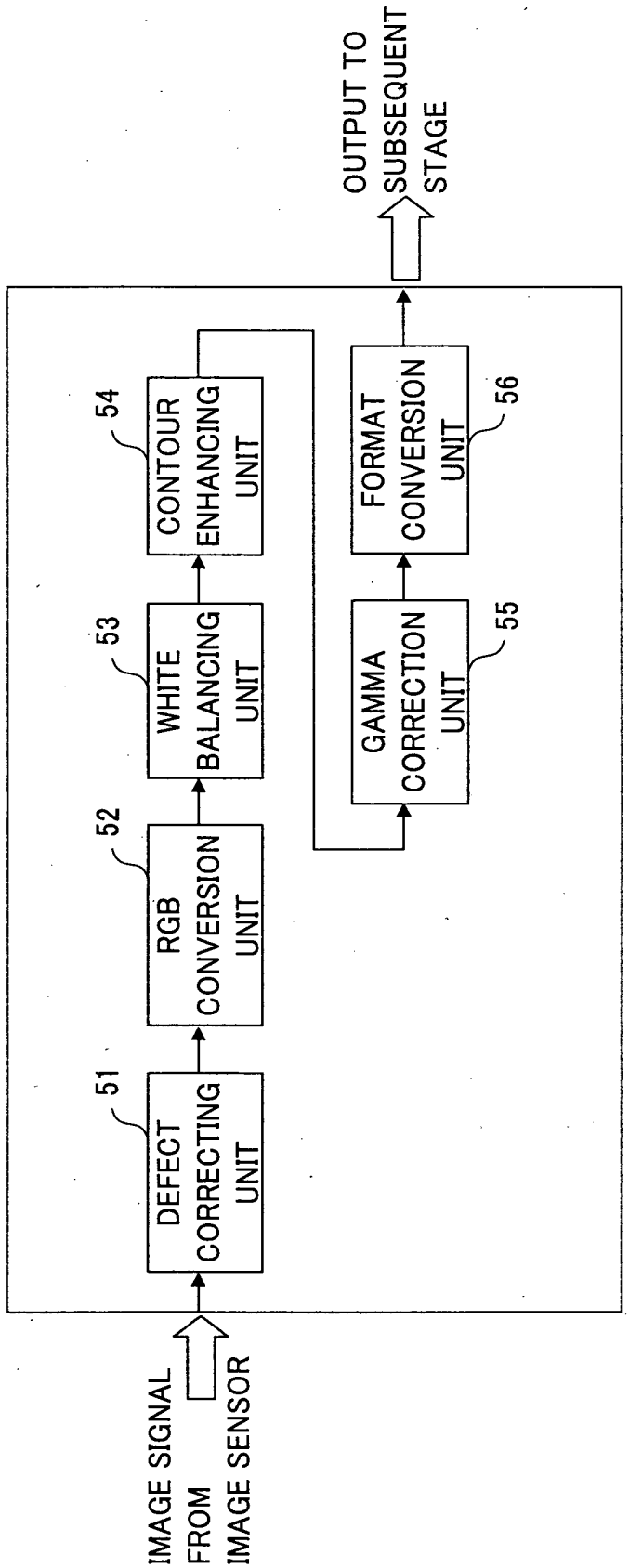
IMAGE SIGNAL FROM IMAGE SENSOR
DEFECT CORRECTING UNIT
51
RGB CONVERSION UNIT
52
WHITE BALANCING UNIT
53
CONTOUR ENHANCING UNIT
54
GAMMA CORRECTION UNIT
55
FORMAT CONVERSION UNIT
56
OUTPUT TO SUBSEQUENT STAGE